

REMARKS

The Office Action of January 16, 2003, and the cited and applied references have been carefully reviewed. No claim is allowed. Claims 2, 3, 20-22, and 25-57 presently appear in this application, with claims 2, 3, 20-22, 25-29, 32-36 43-50, 52 and 53 being withdrawn by the examiner, and define patentable subject matter warranting their allowance. Reconsideration and allowance are hereby respectfully solicited.

A verified English translation of the Japanese priority application 10/347,802 is attached hereto to perfect the claim for foreign priority.

Appropriate correction is made to the title, thereby obviating this objection. The examiner also objects to the abstract as being a single run-on sentence. Applicants respectfully disagree. First, although the abstract is a single, lengthy sentence, it is not, *sensu strictu*, a run-on sentence. A run-on sentence is a sentence whose component parts form separate sentences: it fuses two (or more) sentences together without any punctuation. The abstract of the instant case is a listing of what covered by the application, and the parts of the list do not form separate sentences. However, in deference to the examiner, the abstract is corrected to use commas in the listing of what is encompassed by the present invention. A new Abstract is attached hereto on a separate sheet.

Claim 40 is objected to by the examiner, and appropriate correction to claim 40 has been made, thereby obviating this objection.

Claims 1, 30, 31 and 37-41 are rejected under 35 USC 112, second paragraph, as being indefinite.

Claim 1 is now canceled without prejudice and the remaining rejected claims are amended, to obviate this rejection. The term "modified derivative" is defined in the specification on page 12, lines 11-15.

Claim 31 is rejected under 35 USC 112, second paragraph, as being indefinite. Claim 31 is now amended, thereby obviating this rejection.

Claims 42 and 51 are rejected under 35 USC 112, second paragraph, as being indefinite. Claim 42 is now amended, thereby obviating this rejection.

Claims 1, 30, 31, 37-42 and 51 are rejected under 35 USC 112, first paragraph, because the specification, while being enabling for the protein set forth by residues 54-282 of SEQ ID NO:2, does not reasonably provide enablement for any protein derived from residues 54-282 of SEQ ID NO:2 by addition, deletion, or substitution of amino acids, antibodies against said proteins, or pharmaceutical compositions comprising said proteins. This rejection is respectfully traversed.

The present claims are amended to avoid recitation of any protein derived from residues 54-282 of SEQ ID NO:2 by addition, deletion, or substitution of amino acid residues. Accordingly, applicants believe that this rejection is obviated by the amendments to the claims.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 1, 30, 31, 37-42, and 51 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is respectfully traversed.

The present claims as amended satisfy the written description requirements of §112. The hybridization language used in the present claims is similar to the language used in Example 9 (Hybridization) of the Revised Interim Written Description Guidelines Training Materials.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 1 and 37-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida et al, 1998a. The examiner states that Yoshida teaches a serine protease protein having 100% identity with residues 54-282 of SEQ ID NO:2, and therefore takes the position that claims 1 and 37-42 are anticipated. This rejection is respectfully traversed.

The claims are now amended. Claim 37 now is directed to a method and in claim 42, the protein is now recited as consisting of residues 54-282 of SEQ ID NO:2, which cannot be anticipated by Yoshida.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 1 and 37-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Davies et al, 1998a, Davies et al, 1998b,

or Marra et al, 1996. The examiner states that Davies et al, 1998a and b teach a serine protease protein having 55% identity with residues 55-280 of SEQ ID NO:2 while, Marra et al teach a serine protease protein having 91% identity with residues 116-270 of SEQ ID NO:2. This rejection is respectfully traversed.

Applicants believe that the nucleotide sequences encoding the serine proteases of Davies and Marra would not hybridize to the nucleotide sequences encoding the presently recited protein embodiments under the stringent conditions defined on page 25, line 22 to page 26, line 13 of the specification.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 1 and 37-42 are rejected under 35 U.S.C. 102(a) as being anticipated by Bruck et al, 1999, Tang et al, 1999a, or Tang et al, 1999b. The examiner states that Bruck et al, Tang et al, a and b each teach serine protease proteins that have 100% identity with residues 54-282 of SEQ ID NO:2. This rejection is respectfully traversed.

The claim for foreign priority to the November 20, 1998, filing date of JP 10/347802 is perfected by the verified English translation attached hereto. Accordingly, Bruck and the applied Tang references are not available as prior art.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 1 and 37-42 are rejected under 35 U.S.C. 102(a) as being anticipated by Hillman et al, 1999 or Brewer et al, 1998. The examiner states that Hillman et al teach a serine

protease protein having 96% with residues 54-282 of SEQ ID NO:2 while, Brewer et al teach a protein having 99% identity with residues 54-282 of SEQ ID NO:2. This rejection is respectfully traversed.

The applied Hillman and Brewer references are not available as prior art in view of the presently perfected foreign priority date of November 20, 1998.

Reconsideration and withdrawal of this rejection are therefore respectfully requested.

Claims 1 and 37-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Tang et al, 2000. The examiner states that Tang et al teach a serine protease protein that has 100% identity with residues 54-282 of SEQ ID NO:2. The filing date for US Pat# 6075136 is October 6, 1997. This rejection respectfully traversed.

The claims are now amended to use the closed "consisting of" language to refer to residues 54-282 of SEQ ID NO:2. As Tang does not disclose serine proteases that consists of residues 54-282 of SEQ ID NO:2, Tang cannot anticipate the claims.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 1 and 37-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Cohen et al, 2001 (US Pat# 6232456; Filing Date October 6, 1997), Darrow et al, 2002 (US Pat# 6420157; Filing Date August 31, 1999), Robison et al, 2001 (US Pat# 6331427; Filing Date March 26, 1999), or Southan et al, 2000 (US Pat# 6100059; Filing date April 8, 1998). The examiner

states that Cohen et al teach a serine protease protein that has 97% identity with residues 54-282 of SEQ ID NO:2, Darrow et al teach serine protease protein that has 97% identity with residues 54-282 of SEQ ID NO:2, Robison et al teach serine protease protein that has 73% identity with residues 77-278 of SEQ ID NO:2, and Southan et al teach serine protease protein that has 54% identity with residues 77-278 of SEQ ID NO:2. This rejection is respectfully traversed.

In view of the attached verified English translation of the Japanese priority document, the Darrow and Robison references are not available as prior art. With regard to the Cohen and Southan references, applicants believe that the nucleotide sequences encoding the serine proteases of Cohen and Southan would not hybridize to nucleotide sequences encoding the presently recited protein embodiments under stringent conditions.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claim 38 is rejected under 35 U.S.C. 102(b) as being anticipated by Davies et al, 1998b and 1998a. The examiner states that the sequence taught by Davies et al, 1998a and 1998b is described above. The examiner further states that Davies et al, 1998b also teach that their serine protease, BSP1, is expressed specifically in the hippocampus of the brain (Fig 2B). This rejection is respectfully traversed.

Claim 38 is now amended to be a method claim, which is certainly not anticipated by either of the Davies et al references.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 39-41 are rejected under 35 U.S.C. 102(a) as being anticipated by Tang et al, 1999b. This rejection is respectfully traversed.

Applicants are entitled to the priority filing date of November 20, 1998. Accordingly, Tang is not available as prior art.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 30 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida et al, 1998b. The examiner states that Yoshida et al, 1998b teach an antibody against a protein having the sequence set forth by SEQ ID NO:2 with addition of amino acid residues encoding a hemagglutinin tag (Fig 4). This rejection is respectfully traversed.

Yoshida does not disclose the mature protein and accordingly, applicants do not believe that Yoshida's protein will have the same conformation and the same epitopes to raise the presently claimed antibody.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al, 1998b in view of Harlow, et al, 1988. This rejection is respectfully requested.

As discussed in the §102(b) rejection over Yoshida, there is no disclosure of the mature protein in Yoshida. Therefore, one of ordinary skill in the art would be unable to

obtain the correct conformation of the mature protein to generate antibodies that recognize a mature conformationally correct serine protease of the present invention.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al, 1998b in view of Atkinson et al, 1998 and further in view of Suiden et al, 1992. The examiner states that the teachings of Yoshida et al are described above. Yoshida et al do not teach pharmaceutical compositions comprising their protein. However, the examiner takes the position that it is standard in the art to make pharmaceutical compositions comprising enzymes (Atkinson, et al 1988) and, thus, it would have been obvious to a person of ordinary skill in the art to use the method of Atkinson et al to prepare a pharmaceutical composition comprising the protein of Yoshida et al. This rejection is respectfully traversed.

Yoshida does not disclose a serine protease consisting of residues 54 to 282 of SEQ ID NO:2. Accordingly, a pharmaceutical composition containing such a serine protease consisting of residues 54 to 282 of SEQ ID NO:2 cannot be made obvious by a combination of Yoshida, Atkinson and Suiden because Atkinson and Suiden cannot make up for the deficiency noted in Yoshida.

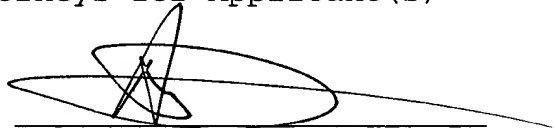
Reconsideration and withdrawal of the rejection are therefore respectfully requested.

In view of the above, the claims comply with 35 U.S.C. §112 and define patentable subject matter warranting their allowance. Favorable consideration is respectfully solicited.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant(s)

By



Allen C. Yun
Registration No.: 37,971

624 Ninth Street, N.W.
Washington, D.C. 20001
Telephone No.: (202) 628-5197
Facsimile No.: (202) 737-3528
G:\BN\A\Aoyb\Uemura4\PTO\amd.May.16.03.doc